

U.S.S.N. 09/709,905
Ramnarayan *et al.*
Preliminary Amendment

at page ~~5~~, line 22, please replace "molecule;" with —molecule—;
at page ~~6~~, line 3, please replace "information," with —information—;
^{which one} at page 6, line 6, please replace "drug" with —drug,—;
at page ~~6~~, line 16, please replace "structures" with —structure—;
at page ~~8~~, line 11, please replace "an" with —and—;
at page ~~8~~, line 24, please replace "identiication" with —identification—;
at page ~~8~~, line 31, please replace "pathogens" with —pathogen—;
at page ~~11~~, line 20, please replace "an" with —a—;
at page ~~12~~, line 1, please replace "variants proteins refer" with —variant proteins refer to—;
at page ~~12~~, line 5, please replace "glyocsylated" with —glycosylated—;
at page ~~12~~, line 9, please replace "to" with —to,—;
at page ~~12~~, line 24, please replace "site of" with —site to—;
at page ~~12~~, line 26, please replace "variablity" with —variability—;
at page ~~15~~, line 6, please replace "targetted" with —targeted—;
at page ~~15~~, line 9, please replace "regaring" with —regarding—;
at page ~~16~~, line 2, please replace "acid" with —acids—;
at page ~~19~~, line 18, please replace "Lipton," with —Lipman,—;
at page ~~19~~, line 22, please replace "Lipton," with —Lipman,—;
at page ~~19~~, line 21, please replace "Huge Computers" with —Human Genome Computing—;
at page ~~19~~, line 22, please replace "1994" with —1998—;
at page ~~20~~, line 6, please replace "purposes" with —purposes,—;
at page ~~20~~, line 10, please replace "polynucleotides" with —polynucleotide—;
at page ~~20~~, line 12, please replace "sequence" with —sequence,—;
at page ~~20~~, line 16, please replace "arts" with —art—;
at page ~~20~~, line 25, please replace "know in the arts" with —known in the

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art—;

at page ~~20~~, line 28, please replace "structure-activity" with —quantitative structure-activity—;

at page ~~21~~, line 18, please replace "includes" with —include—;

at page ~~21~~, line 22, please replace "and based" with —based—;

at page ~~21~~, line 27, please replace "complexes;" with —complexes; and—;

at page ~~22~~, line 4, please replace "particularl" with —particular—;

at page ~~23~~, line 7, please replace "use" with —the use—;

at page ~~24~~, line 15, please replace "includind" with —including—;

at page ~~24~~, line 17, please replace "as" with —as a—;

at page ~~24~~, line 17, please replace "interaction ," with —interaction,—;

at page ~~24~~, line 20, please replace "population)" with population),—;

at page ~~25~~, line 14, please replace "for example" with —for example,—;

at page ~~25~~, line 15, please replace "isolated," with —isolated therefrom,—;

at page ~~25~~, line 15, please replace "identified" with —identified,—;

at page ~~25~~, line 21, please replace "determinedthrough" with —determined through—;

at page ~~37~~, line 10, please replace "complexes;" with —complexes; and—;

at page ~~38~~, line 9, please replace "Kurtz" with —Kuntz—;

at page ~~38~~, line 18, please replace "methods" with —and methods—;

at page ~~39~~, line 19, please replace "identity drug candidates. If need" with —identify drug candidates. If needed—;

at page ~~39~~, line 28, please replace "solvent]" with —solvent—;

at page ~~40~~, line 24, please replace "proteins in order to perserve function" with —proteins, in order to preserve function,—;

at page ~~41~~, line 16, please replace "and based" with —based—;

at page ~~41~~, line 21, please replace "determining" with —and determining—;

at page ~~42~~, line 18, please replace "methods" with —method—;

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at page ~~42~~, line 28, please replace "that for" with —for—;
at page ~~45~~, line 3, please replace "effects" with —effects on—;
at page ~~46~~, line 1, please replace "queries" with —queries,—;
at page ~~49~~, line 7, please replace "follow-on" with —follow-up—;
at page ~~50~~, line 9, please replace "strains)." with —strains").—;
at page ~~50~~, line 13, please replace "calulating" with —calculating—;
at page ~~50~~, line 19, please replace "comtaining" with —containing—;
at page ~~52~~, line 22, please replace "controls" with —

A1 controls—;

at page ~~52~~, line 29, please replace "is" with —are—;
at page ~~53~~, line 11, please replace "correlated" with —correlated with—;
at page ~~54~~, line 23, please replace "can be drug target, such as receptors"
with —can be genes of drug targets, such as receptors,—;
at page ~~61~~, line 12, please replace "acadmenic" with —academic—;
at page ~~61~~, line 19, please replace "paticularly" with —particularly—;
at page ~~61~~, line 22, please replace "exemplary" with —exemplary—;
at page ~~62~~, line 7, please replace "HCV" with —HEPATITUS C *virus*
(HCV)—;

at page ~~62~~, line 14 please replace "virially" with —virally—;
at page ~~63~~, line 32, please replace "from the arts" with —from known art—;
at page ~~64~~, line 21, please replace "Kluwer Academic Publishers," with

A2 —ESCOM Science Publishers BV, —

at page ~~64~~, line 22, please replace "Dordrecht, The Netherlands, p.363)."
with —Leiden.—;

at page ~~65~~, line 13, please replace "deviation)," with —deviation)—;

at page ~~69~~, line 1, please replace "TNF" with —tumor necrosis factor

A3 (TNF)—

at page ~~72~~, line 5, please replace "add" with —and—;

at page 74, line 1, please replace "217:33231-33235)" with —271:33231-

A4 33235)F;

- at page ~~75~~, line 9, please replace "arts" with —art—;
at page ~~79~~, line 19, please replace "surfaces," with —surfaces—;
at page ~~81~~, line 23, please delete "Resistance_Entry_ID";
at page ~~81~~, line 24, please replace "is; Protein_ID" with —Protein_ID—;
at page ~~82~~, line 11, please delete "Chain,";
at page ~~84~~, line 14, please replace "arts" with —art—;
at page ~~85~~, line 1, please replace "have" with —has—;
at page ~~85~~, line 9, please replace "and" with —can—;
at page ~~85~~, line 25, please replace "trials and" with —trials,—;
at page ~~85~~, line 26, please replace "for designing" with —to design—;

IN THE CLAIMS:

Please amend claims 7, 8, 20, 21, 23, 27, 48, 53 and 56 as follows:

AS 7. (Amended) The method of claim 6, wherein the conserved residues comprise residues [comprise residues] 1-9, 25-29, 49-52, 78-81 and 94-99; and wherein:

residue 1 is an aliphatic amino acid; residue 2 is a hydrophilic amino acid; residue 3 is an aliphatic amino acid; residue 4 is a hydrophilic amino acid; residue 5 is a hydrophobic amino acid; residue 6 is an aromatic amino acid; residue 7 is a hydrophilic amino acid; residue 8 is a basic amino acid; residue 9 is an aliphatic amino acid; residue 25 is an acidic amino acid; residue 26 is a hydrophobic amino acid; residue 27 is an aliphatic amino acid; residue 28 is an aliphatic amino acid; residue 29 is an acidic amino acid; residue 49 is an aliphatic amino acid; residue 50 is a hydrophobic amino acid; residue 51 is an aliphatic amino acid; residue 52 is an aliphatic amino acid; residue 78 is an aliphatic amino acid; residue 79 is an aliphatic amino acid; residue 80 is a hydrophilic amino acid; residue 81 is an

aliphatic amino acid; residue 94 is an aliphatic amino acid; residue 95 is a thio-containing amino acid; residue 96 is a hydrophilic amino acid; residue 97 is hydrophobic amino acid; residue 98 is hydrophilic amino acid; and residue 99 is an aromatic amino acid.

8. (Amended) The method of claim 6, wherein the conserved residues comprise residues [comprise residues] 1-9, 25-29, 49-52, 78-81 and 94-99; and wherein:

AS
residue 1 is proline; residue 2 is glutamine; residue 3 is isoleucine; residue 4 is threonine; residue 5 is leucine; residue 6 is tryptophan; residue 7 is glutamine; residue 8 is arginine; residue 9 is proline; residue 25 is aspartic acid; residue 26 is threonine; residue 27 is glycine; residue 28 is alanine; residue 29 is aspartic acid; residue 49 is glycine; residue 50 is isoleucine; residue 51 is glycine; residue 52 is glycine; residue 78 is glycine; residue 79 is proline; residue 80 is threonine; residue 81 is proline; residue 94 is glycine; residue 95 is cysteine; residue 96 is threonine; residue 97 is leucine; residue 98 is asparagine; and residue 99 is phenylalanine.

AB SUB C4
20. (Amended) The method of claim 12¹³, wherein the selected model structures represent structural variants derived from patients [the] that receive a specific treatment regimen.

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21. (Amended) The method of claim 12¹³, wherein the selected model structures represent structural variants derived from patients that exhibit a particular clinical response[s] to a given drug.

A7
23. (Amended) The method of claim 12¹³, wherein the structural variant models are stored in a relational database, comprising: 3-D molecular coordinates for the structural variants; a molecular graphics interface for 3-D molecular